

AMENDMENT

In the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

1. (Currently amended) A method of eliciting ~~an~~ a humoral immune response against a hepatitis C virus (HCV) E2 or E1E2 antigen comprising the step of (a) administering to a subject (i) a composition comprising an isolated polynucleotide encoding an HCV E1E2 antigen, wherein the E1E2 antigen ~~comprises~~ consists of an HCV E1 polypeptide and an HCV E2 polypeptide and optionally an HCV p7 polypeptide, and further wherein the E1E2 antigen encoded by the polynucleotide is selected from the group consisting of a sequence of amino acids corresponding to amino acids 192-746 numbered relative to the HCV-1 polyprotein, a sequence of amino acids corresponding to amino acids 192-749 numbered relative to the HCV-1 polyprotein, and a sequence of amino acids corresponding to amino acids 192-809 numbered relative to the HCV-1 polyprotein, or (ii) a composition comprising an isolated polynucleotide encoding a full-length E2 antigen, wherein said full-length E2 antigen does not include the p7 polypeptide, wherein the E2 antigen encoded by the polynucleotide is selected from the group consisting of a sequence of amino acids corresponding to amino acids 384-746 numbered relative to the HCV-1 polyprotein, and a sequence of amino acids corresponding to amino acids 384-749 numbered relative to the HCV-1 polyprotein,

wherein the E2 or E1E2 antigen encoded by the polynucleotide is produced intracellularly and not secreted when expressed in cells of the subject.

2. (Cancelled)

3. (Currently amended) The method of claim ~~2~~ 1, wherein the humoral immune response generates at least one neutralization of binding (NOB) antibody.

4. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the composition comprises an isolated polynucleotide that encodes an E1E2 antigen, wherein the E1E2 antigen ~~comprises~~ consists of an HCV E1 polypeptide and an HCV E2 polypeptide and optionally an HCV p7 polypeptide.

5. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the composition comprises an isolated polynucleotide that encodes a full-length E2 antigen.

6. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the HCV E1E2 antigen does not comprise a p7 polypeptide.

7. (Cancelled)

8. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the polynucleotide is in a plasmid.

9. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the subject is infected with an HCV.

10. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the subject is not infected with an HCV.

11. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, further comprising the step of administering cardiotoxin to the subject.

12. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the polynucleotide is administered using a microparticle.

13. (Previously presented) The method of claim 12, wherein the microparticle is a PLG microparticle.

14. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the subject is a mammal.

15. (Original) The method of claim 14, wherein the mammal is selected from the group consisting of a mouse, a rabbit, a guinea pig, a macaque, a baboon, a chimpanzee, and a human.

16. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the polynucleotide is administered using a biolistic delivery device.

17. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, wherein the polynucleotide is administered by a method selected from the group consisting of intramuscular, subcutaneous, intraperitoneal, intranasal, oral, and intradermal administration.

18. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of an E2 polypeptide to its cognate receptor by an amount which is greater relative to binding of the E2 polypeptide to its cognate receptor in the absence of the neutralizing of binding antibody.

19. (Original) The method of claim 3, further comprising the step of detecting the neutralizing of binding antibody.

20. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:70.

21. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:140.

22. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:300.

23. (Original) The method of claim 3 wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:600.

24. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:800.

25. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:3,000.

26. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, further comprising repeating step (a).

27. (Currently amended) The method of claims ~~1-3 or claim 7~~ 1 or 3, further comprising administering to the subject a polypeptide encoded by the polynucleotide.